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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,583	10/15/2003	Gregory M. Glenn	PA3387US	2329

7590 04/26/2006

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EXAMINER	
POPE, DARYL C	

ART UNIT	PAPER NUMBER
2612	

DATE MAILED: 04/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/684,583	GLENN ET AL.	
	Examiner	Art Unit	
	DARYL C. POPE	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 April 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-96* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-96* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 34 recites the limitation "the server" in line 1. There is insufficient antecedent basis for this limitation in the claim.

ART REJECTION:

Claim Rejections - 35 USC § 103

4. Claims 1-96 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grube et al in view of Lauber et al.

-- In considering claims 1, the claimed subject matter that is met by Grube et al(Grube) includes:

1) the sensor for obtaining data of an environmental nature is met by the sensor(37) of subscriber units(22) which sense environmental conditions(see: column 3, lines 4-25).

- Grube does not show:

2) the control board for placing data into at least one packet and transmitting the packet from the control board using wireless communications.

Although specific use of a control board is not taught in Grube, Grube does teach use of a processing unit(50) which processes and provides digital information about sensed

environmental conditions to a wireless transceiver(see: column 4, lines 36-44) Use of boards for a processing data into data packets for wireless communication is wel known in the art. In related art, Lauber et al(Lauber) discloses a wireless digital/analog data telemetry system which utilizes a control board for microprocessor(144)(see: sec [0129]). Furthermore, the microprocessor places data collected from sensors into data packets and transmits the packets via wireless communications(see: sec [0123]).

Since use of a data board for processing sensor data and placing the data into data packets for wireless communication is well known as seen by Lauber, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a the control board and microprocessor(144) of Lauber into the processing unit(50) of Grube, since the Grube teaches that the processing unit(50) processes and provides information about the sensed environmental conditions to a wireless transceiver(see: column 4, lines 36-44), and therefore, utilization of data packets in the processing unit for the purpose of transmitting data via the wireless transceiver, would have constituted a well known and efficient method for transmitting information.

As well, it would have been obvious that processing unit(50) would have allowed processing of data from a variety of types of data collection devices, since Grube teaches that the sensor(37) may be a plurality of sensors to sense a plurality of environmental conditions(see: column 3, lines 11-13), which would have required that the processing unit have the ability to process data from any and all of the plurality of sensors.

As well, the examiner takes Official Notice that in the remote sensor art, use of batteries for providing power to control boards, and as well use of solar panels for recharging the batteries are well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the above stated devices into the units(22) of Grube, since some form of power source would have been required in order for the device to operate, and therefore use of batteries, and as well solar panels to recharge the batteries would have reduced cost by alleviating the necessity for constant replacement of batteries when they would have run out of power.

-- With regards to claim 2, the sensors being digital sensors although not specifically stated by Grube, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate digital sensors into the sensors(37) of Grube, since Grube already teaches presenting condition data to the processing unit(50) in digital form(see: column 4, lines 13-15), and therefore a digital sensor would have alleviated the need of incorporating a converter before the information would have been presented to the unit(50).

-- With regards to claims 3-4, although not taught by Grube, the examiner takes Official Notice that in the remote sensor art, use of analog sensors, as well as analog to digital converters are well known in the art, and therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate analog sensors into the sensors(37) of Grube, since analog sensors perform a better job of sensing certain environmental conditions than digital sensors, and therefore this would

have augmented the overall performance of the sensors to provide the most accurate data. Furthermore, upon incorporation of the analog sensors, it would have been necessary for one of ordinary skill in the art to incorporate the analog to digital converter, since a conversion of the analog data would have been necessary before it would have been presented to the processing unit(50).

-- With regards to claim 5, Lauber teaches RS-232 protocol, and therefore, upon incorporation of the control board and microprocessor(144) of Lauber into the system of Grube as discussed above, it would have also been obvious to one of ordinary skill in the art at the time the invention was made to as well incorporate the RS-232 protocol of Lauber into the system of Grube, since this would have facilitated transmission of data from the sensors in the system.

-- Claim 6 recites subject matter that is met as discussed in claim 1 above.

-- Claims 7-9 recite subject matter that is met as discussed in claims 2-4 above.

-- With regards to claims 10-12, the temperature sensor is met by the sensor(37) monitoring temperature(see: Grube, 3, lines 4-13).

-- With regards to claims 13-14, the examiner takes Offical Notice, that in the remote sensor art, use of voltage sensors that measure and monitor voltage of a power system, including solar/battery systems is well known in the art. Therefore, upon incorporation of the solar/battery system into Grube in view of Lauber as discussed in claim 1 above, it would have been obvious to one ordinary skill in the art at the time the invention was made to incorporate a voltage sensor into the device of Grube in view of Lauber since

this would have allowed a user of the device to recognize a proper to recharge the device.

-- Claims 15, and 17-20 recite subject matter that is met as discussed in claim 1 above.

-- With regards to claim 16, since Grube already teaches monitoring of a plurality of conditions(see: column 3, lines 4-10, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a liquid level as one of the monitored conditions, since Grube teaches monitoring weather conditions, an monitoring of a liquid level could constitute a weather condition associated with rain or flooding.

-- With regards to claims 21-32, Lauber teaches use of GPRS/GSM gateway, parallel or serial ports, telemetry radio, serial data interfaces, an N-byte messages, and therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate any and/or all of the above stated means into the system of Grube, since this would have facilitated processing, transmission, and dissemination of the data by authorized users of the system.

-- With regards to claim 33, the memory device for storing data is met by the memory(52) of Grube.

-- With regards to claims 34-35, the server that interprets the data is met by the controller(30) including processing unit(70) which interprets information about the sensed environmental condition(see: column 5, lines 1-10) and the data being stored on memory is met by the memory(52).

-- With regards to claim 36, the data being stored based upon an identifier associated with the sensor is met by the information in the database(20,32) pertaining to communication devices having an identity(see: column 5, lines 37-56).

-- Claims 37-96 recite subject matter that is met as discussed in claims 1-36 above, except for:

1) the data being accessed remotely via computer network, the network being the Internet, wide area network, or local area network.

Although Grube discloses specific use of a PSTN(16), the examiner takes Official Notice that in the remote sensor art, use of computer networks including the Internet, wide area network, and local area networks for remotely accessing data in a system is well known in the art, and therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute any of the above stated networks into the system of Grube, since one of ordinary skill would have readily recognized the advantage of one particular network over another for the purpose of accessing data remotely in the most advantageous manner possible.

REMARKS:

Response to Arguments

5. Applicant's arguments with respect to claims 1-96 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DARYL C. POPE whose telephone number is 571-272-2959. The examiner can normally be reached on M-TH 9:00-7:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MIKE HORABIK can be reached on 571-272-3068. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daryl C. Pope

April 13, 2006

DARYL C POPE
Primary Examiner
Art Unit 2612